

AMENDMENTS TO THE SPECIFICATION

Page 3, amend paragraph 1 to read:

To achieve the above objects, the present invention mainly comprises a high-pressure gas container, a connecting ring, a piston, and a combustion chamber. The high-pressure gas container contains a first gas therein and has an opening sealed by a pressure-resisting disc. An extension ring portion is formed around the opening of the high-pressure gas container, which has at least one exhaust outlet opened in radial direction. A connecting ring[[,]] is received within the extension ring portion. A partition plate at the middle level of the connecting ring separates the connecting ring into an upper ring and a lower ring. The lower ring has at least one gas outlet opened radially. The partition plate has a first central hole opened toward an axial direction. A piston includes an axle passing through the first central hole and sliding along the axial direction, a pressure-receiving portion formed on a top end of the axle. The bottom end of the axle extends to against the pressure-resisting disc covering the opening of the high-pressure gas container. The axle further contains an axial hole extending axially from the top end to the bottom end inside the axle. A combustion chamber, fixed within the extension ring portion, contains a predetermined amount of second gas generant therein. The combustion chamber has a gas exit corresponding to the pressure-receiving portion of the piston.

Page 4, amend paragraph 3 to read:

Further, when the inflation device of present invention is not in ~~used~~ use, the axle of the piston can support the pressure-resisting disc to prevent it from accidental breakup.

Page 6, amend paragraph 2 to read:

The piston 3 includes an axle 31 that passes through the first central hole 211 within the connecting ring 2. Guided by the first central hole 211, the piston 3 is allowed to slide along the axis of the connecting ring 2. An axial hole 311 is formed within the

axle 31 along its axis, extending from the top end 312 of the axle 31 to the bottom end 313 of the axle 31. The top end 312 of the axle 31 is formed of a pressure-receiving portion 32, and the axle 31 is so extended that its bottom end 313 pushes against the pressure-resisting disc 12 at the opening 11 of the high-pressure gas container 1. Note that the bottom end 313 of the axle 31 pushing against the pressure-resisting disc 12 further prevents the hazardous accident of breakup of the pressure-resistive disc 12.

Page 6, amend paragraph 3 (bridging pages 6 and 7) to read:

The combustion chamber 4, composed of an upper shell 43 and a lower shell 44 being ~~erewed~~ screwed together, is fixed in the extension ring portion 13. The composition of the upper shell 43 and the lower shell 44 can also be achieved by rivet jointing or welding. The upper shell 43 and the lower shell 44 define a hollow chamber 45, which contains a combustion-enhancement space 46 at the center surrounded by the second gas generant 401. A gas exit 41 is formed on the bottom of the combustion chamber 4 facing to the pressure-receiving portion 32 of the piston 3. To protect the gas generant in the combustion chamber 4 from moisture, a seal foil 42 made of aluminum is used to seal the gas exit 41. The combustion chamber 4 is separated from the piston 3 by a tray 6 installed within the extension ring portion 13. The tray 6 has a second central hole 61 in the corresponding position to the gas exit 41 of the combustion chamber 4 and is in contact with the pressure-receiving portion 32 on the top end 312 of the axle 31. The combustion chamber 4 is locked within the extension ring portion 13 by screwing a top cover 5 to the upper rim of extension ring portion 13. The composition of the top cover 5 and the extension ring portion 13 can also be achieved by rivet jointing or welding.

Page 7, amend paragraph 2 (bridging pages 7 and 8) to read:

Fig. 4 shows the action of the piston 3 on the pressure-resisting disc 12 activated by the second gas 40. Since the second central hole 61 on the tray 6 is larger than the axial hole 311 in the piston 3, the second gas 40 ejected from the combustion chamber 4 exerts

a force on the pressure-receiving portion 32 and thereby drives the piston 3 to move axially. The axially moving axle 31 of the piston 3 and the high-pressure hot jet flow in the axial hole 311 together break through the pressure-resisting disc 12, by which the second gas 40 flows into the high-pressure gas container 1 to mix with and heat up the first gas 10. The hybrid gas of the first gas 10 and the second gas 40 is ejected from the high-pressure gas container 1 through the opening 11, the gas outlets 221 of the connecting ring 2, and the exhaust outlets 131 of the extension ring portion 13. Because the second gas 40 generated by the combustion chamber 4 is hot, it can heat up and increase the ~~sp~~pressure pressure of the first gas 10 in the high-pressure gas container 1 before exiting the container. Therefore, the size and weight of the inflation device is significantly reduced. Note that, as an extra advantage, at the same time the axle 31 breaks the pressure-resisting disc 12, the bottom end 313 of the axle 31 intrudes deep into the high-pressure gas container 1, which makes the second gas 40 ~~can~~ flow into the high-pressure gas container 1 deeply, and makes the mixing of the first gas 10 and the second gas 40 more efficient.